WHAT IS CLAIMED IS:

1. A circuit for stabilizing the operating point of a respirator type apparatus used for delivering gas to an entrance into the pulmonary tract of a patient during breathing comprising:

a pressure transducer responsive to the breath of said patient;

a differential amplifier;

initialization means coupled to the output of said differential amplifier;

a voltage comparator coupled to the output of said initialization means;

and

a delayed negative feedback circuit coupled to the output of said initialization means; the output of said delayed negative feedback circuit being coupled to said differential amplifier.

- 2. The circuit of claim 1 wherein said pressure transducer comprises a piezoresistive sensor.
- 3. The circuit of claim 1 wherein said delayed feedback circuit reduces the gain of said differential amplifier to substantially zero during a predetermined time period upon activation of said initialization means and restores the circuit to maximum AC gain at the end of the initialization period.

- 4. The circuit of claim 3 wherein the output of said voltage comparator changes state when the breath of a patient is detected subsequent to the completion of said predetermined time period.
- 5. The circuit of claim 1 further including a voltage clamping circuit connected to the output of said differential amplifier.